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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Richard J. HICKEY, Jr.
Assignee: Radio Computing Services, Inc.
Serial No.: 10/643,729
Filed: 19 August 2003
Title: Method, Apparatus and Article for Data Reduction
Attorney Docket: 505/1

INFORMATION DISCLOSURE STATEMENT

SIR:

Pursuant to provisions of 37 C.F.R. 1.97 and 1.98, Applicant hereby identifies the following Patents of which it has knowledge. Applicant makes no representation as to whether or not it has conducted a search and is identifying and disclosing these patents in order to comply with its duty to disclose, pursuant to 37 C.F.R. 1.56. Copies of these patents are enclosed, along with PTO form 1449.

Further, the filing of this Information Disclosure Statement does not constitute an admission that the patents are prior art, or are material to patentability of the subject matter of this invention.

PATENT

<u>Inventor</u>	<u>Pat. No.</u>	<u>Date</u>	<u>Title</u>
Ellis	5,621,454	15 April 1997	Method and System for Recognition of Broadcast Segments
Boles	5,019,899	28 May 1991	Electronic Data Encoding and Recognition System
Lamb	4,437,050	25 July 1995	Method and Apparatus for Recognizing Broadcast Information using Multi-Frequency Magnitude Detection

A corresponding PCT application No. PCT/US04/25628 has been filed on 9 August 2004. As part of that application, the International Searching Authority has conducted a search. The above referenced Patents have been identified through that search. Further, a copy of the International Search Report and corresponding opinion of the International Searching Authority are enclosed.

Boles and Lamb define the general state of the art and are not believed to be of particular relevance.

Ellis discloses the use of an embedded bitted keyword in a video signal, the probability of matching the keyword to a predefined keyword in a specified location on the frame of video and defines the general state of the art.

The present application discloses the reduction of a signal to a series of defined peaks, and the probability of a broadcast segment matching a known segment. The Ellis patent discloses a basic set of probability formulas and a method of calculating the success of matching the two keywords which are restricted to a specified length and may be offset in location on a frame. Claim 70 of the present application discusses the use of probability to determine if a set of peaks from a new media segment which may vary in quantity and location in time, matches a set of peaks from a known media segment. While, the principles of probability and statistics underlie both Ellis and the present application, the methods of achieving the results are strikingly

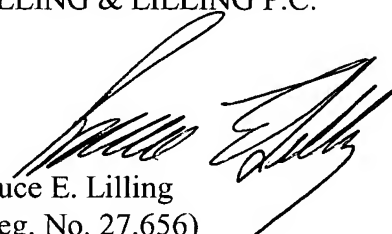
PATENT

different. The Ellis patent requires a specific size for the keyword, whereas, the present application accepts a varying dataset and is able to adapt to that changing condition. Further, the Ellis patent requires the keyword to be previously generated and stored allowing the comparison of only those video segments for which the user has a keyword, limiting the ability for competing media companies to track the variety of programs being broadcast. The present application permits through the use of the probability and statistical methods of claim 70 is able to generate a signature for almost any media compilation.

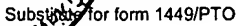
Since, none of the prior art references discloses a method of reducing the signal of media segment to a signature based on number of peaks which may vary in time and size, and the probability of a new media segment which may not be identical in time and size actually matching the original segment. Therefore, the instant invention is patentably distinct from, and unobvious in view of, the above patents, whether considered singly or in combination.

Dated: February 28, 2005

Respectfully submitted
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PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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Complete if Known

Application Number	10/643,729
Filing Date	19 August 2003
First Named Inventor	Richard J. HICKEY, Jr
Art Unit	
Examiner Name	
Attorney Docket Number	505/1

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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